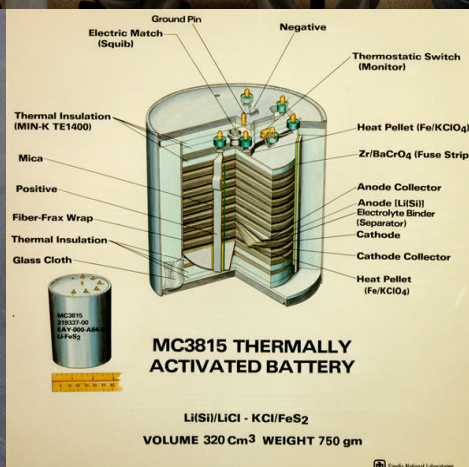
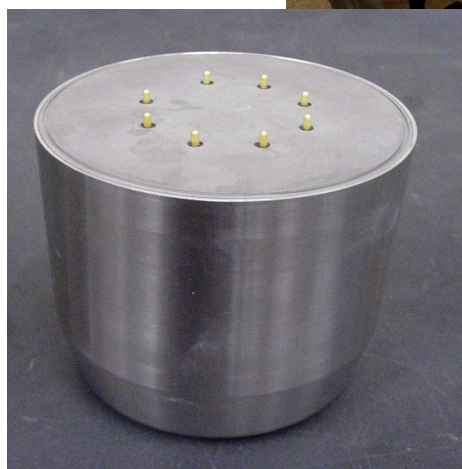


# The MC4708 Thermal Battery Assembly

The MC4708 thermal battery assembly is a new component for the W76-1 LEP AF&F. This is the first new thermal battery developed for a DOE application in over 10 years. It is also one of the most challenging, with requirements for an hour of activated life, four voltage sections, large pulse loads at the end of life, and very tight volume and weight constraints. In fact, this one battery must do the same job as two thermal batteries in the W88 AF&F. The smiling MC4708 PRT from the Power Sources Technology Group is pictured, along with an outside and inside view of a thermal battery.

This challenging design project is making excellent progress. Through extensive materials studies, the specifications for the battery constituents have been established with more than 50 batteries built and tested so far to evaluate the many design options. Batteries can now be built that meet the existing requirements, and a prototype design is nearly ready to be established. This represents a major achievement for the PRT and signals that the battery is on track to meet FPU requirements.



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